



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0753; Directorate Identifier 2013-CE-025-AD; Amendment 39-17677; AD 2013-24-03]**

**RIN 2120-AA64**

**Airworthiness Directives; Beechcraft Corporation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Beechcraft Corporation (type certificate previously held by Hawker Beechcraft Corporation) Models 1900, 1900C, and 1900D airplanes. This AD was prompted by reports of cracking in the front spar cap angles and hat section structure of the vertical stabilizer. This AD requires inspections of the vertical stabilizer spar angles and hat section for cracks with corrective actions as necessary. We are issuing this AD to correct the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Beechcraft Corporation at address: 10511 E. Central, Wichita, Kansas 67206; phone: (800) 429-5372 or (316) 676-3140; Internet: [http://www.beechcraft.com/customer\\_support/contact\\_us/](http://www.beechcraft.com/customer_support/contact_us/). You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Paul Chapman, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4152; fax: (316) 946-4107; email: [paul.chapman@faa.gov](mailto:paul.chapman@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM published in the Federal Register on August 27, 2013 (78 FR 52870). The NPRM proposed to require doing visual inspections of the vertical stabilizer spar angles and hat section for cracks and taking corrective actions as necessary.

## **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and the FAA's response to each comment.

### **Further Support for the AD**

Scott Lewis suggested that the number of cracks reported may not be accurate. The commenter stated that his fleet had 53 cracks, which is a much higher percentage of airplanes cracked than the 56 cracks reported in the 140 airplanes that Beechcraft reported to the FAA. The commenter proposed no changes to the AD.

We agree that the percentage of cracks reported may be low. This further justifies the need for the AD action and therefore, no changes to the final rule are necessary.

### **Costs of Compliance Too Low**

Scott Lewis stated the costs supplied by Beechcraft are too low and that the actual costs are running \$5,983 per side for the spar cap angles plus \$9,212 for engineer support for a total of \$15,195. This is compared to the \$3,150 cited in the NPRM. This does not include the cost of the hat section if it requires repair.

We agree with the commenter. After re-verifying the cost estimate with Beechcraft, they have corrected the costs as follows:

- \$6,000 per side for the spar repair kit;
- Around \$15,000 for engineering support since these are not standard repairs.

We have changed the AD accordingly.

### **Continued Flight Before Repair Provided Cracks do not Propagate**

Scott Lewis stated that he had been issued up to an additional 2,700 flight hours after a crack was found as long as the crack did not propagate. Although no request to change the NPRM was made, the FAA infers that the commenter wants to add the provision of flight with known cracks provided any known crack does not propagate.

The FAA does not agree. The FAA's Small Airplane Directorate does not allow further flight with known cracks in critical structure without additional substantiating data. Advisory Circular (AC) 23-13A, Chapter 6, dated September 29, 2005, describes what additional data is required to allow flight with known cracks (found on the Internet at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAdvisoryCircular.nsf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf)).

We are making no changes to the AD based on this comment.

### **Conclusion**

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (78 FR 52870, August 27, 2013) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (78 FR 52870, August 27, 2013).

## Costs of Compliance

We estimate that this AD affects 400 airplanes.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Visual inspection of the vertical stabilizer spar angles and hat section	1.5 work-hours X \$85 per hour = \$127.50	Not applicable	\$127.50	\$51,000

We estimate the following costs to do any necessary repairs that are required based on the results of the inspection. We have no way of determining the number of airplanes that might need these repairs:

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repair of the spar cap (right hand or left hand)	30 work-hours X \$85 per hour = \$2,550	\$6,000 per side plus \$15,000 per engineering support	As much as \$29,550 if both sides needed repair.

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-24-03 **Beechcraft Corporation (type certificate previously held by Hawker Beechcraft Corporation)**: Amendment 39-17677; Docket No. FAA-2013-0753; Directorate Identifier 2013-CE-025-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Beechcraft Corporation airplanes in table 1 of this AD, certificated in any category:

**Table 1 to paragraph (c) of this AD—Applicability**

<b>Model</b>	<b>Serial Numbers</b>
1900	UA-3
1900C	UB-1 through UB-74, UC-1 through UC-174
1900C (C-12J)	UD-1 through UD-6
1900D	UE-1 through UE-439

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 55, Stabilizers.

**(e) Unsafe Condition**

This AD was prompted by reports of cracking in the front spar cap angles and hat section of the vertical stabilizer structure. We are issuing this AD to detect and correct cracking in the vertical stabilizer structure, which could lead to structural failure of the vertical stabilizer and result in loss of control.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Visual Inspections**

(1) For all airplanes: Within the next 600 hours time-in-service (TIS) after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), inspect part number (P/N) 101-640011-3/-4 spar angles and P/N 114-640000-25/-26 hat section for cracks following the Accomplishment Instructions in paragraph 3.A. of Hawker Beechcraft Mandatory Service Bulletin SB 55-4114, dated August 2012.

(2) For Models 1900 and 1900C airplanes: Within 1,200 hours TIS after the initial inspection required in paragraph (g)(1) of this AD or within 2 years after the initial inspection required in paragraph (g)(1) of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 1,200 hours TIS or 2 years, whichever occurs first, inspect P/N 101-640011-3 and P/N 101-640011-4 spar cap angles for cracks. Follow Procedure 8 under Vertical Stabilizer in the "I" Check Procedures of Hawker Beechcraft Corporation Model 1900/1900C Airliner Structural Inspection Manual, Part Number 98-30937G2, dated May 1, 2013.

(3) For Models 1900 and 1900C airplanes: Within 1,200 hours TIS after the initial inspection required in paragraph (g)(1) of this AD or within 2 years after the initial inspection required in paragraph (g)(1) of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 1,200 hours TIS or 2 years, whichever occurs first, inspect P/N 114-640000-25 and P/N 114-640000-26 hat section for cracks. Follow Procedure 9 under Vertical Stabilizer in the “I” Check Procedures of Hawker Beechcraft Corporation Model 1900/1900C Airliner Structural Inspection Manual, Part Number 98-30937G2, dated May 1, 2013.

(4) For Model 1900D airplanes: Within 1,200 hours TIS after the initial inspection required in paragraph (g)(1) of this AD or within 2 years after the initial inspection required in paragraph (g)(1) of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 1,200 hours TIS or 2 years, whichever occurs first, inspect P/N 101-640011-3 and P/N 101-640011-4 spar cap angles for cracks. Follow Procedure 6.b. under Vertical Stabilizer Canted Stabilizer Station (CSS 69.184 through VSS 91.10) in the “I” Check Procedures of Beechcraft Corporation Model 1900D Airliner Structural Inspection Manual, Part Number 129-590000-65E5, dated May 1, 2013.

(5) For Model 1900D airplanes: Within 1,200 hours TIS after the initial inspection required in paragraph (g)(1) of this AD or within 2 years after the initial inspection required in paragraph (g)(1) of this AD, whichever occurs first, and repetitively thereafter at intervals not to exceed 1,200 hours TIS or 2 years, whichever occurs first, inspect P/N 114-640000-25 and P/N 114-640000-26 hat section for cracks. Follow Procedure 6.c. under Vertical Stabilizer Canted Stabilizer Station (CSS 69.184 through VSS 91.10) in the “I” Check Procedures of Beechcraft Corporation Model 1900D Airliner Structural Inspection Manual, Part Number 129-590000-65E5, dated May 1, 2013.

**(h) Repair**

If any cracks are found during any of the inspections required in paragraph (g) of this AD, to include all subparagraphs, before further flight, you must contact Beechcraft Corporation to obtain repair instructions approved by the Wichita Aircraft Certification Office (ACO) specifically for compliance with this AD and incorporate those instructions. You can find contact information for Beechcraft Corporation in paragraph (l)(3) of this AD.

**(i) Special Flight Permit**

If cracks are found during any of the inspections required in paragraph (g) of this AD, to include all subparagraphs, the FAA may allow a one-time special flight permit to a repair facility depending on the cracking found. You must contact Beechcraft Corporation and provide them with crack detail information for them to determine residual strength of the airplane before applying to the FAA for a special flight permit. You can find contact information for Beechcraft Corporation in paragraph (l)(3) of this AD.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

For more information about this AD, contact Paul Chapman, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4152; fax: (316) 946-4107; email: paul.chapman@faa.gov.

**(l) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Hawker Beechcraft Mandatory Service Bulletin SB 55-4114, dated August 2012.

(ii) Hawker Beechcraft Corporation Model 1900/1900C Airliner Structural Inspection Manual, Part Number 98-30937G2, dated May 1, 2013.

(iii) Beechcraft Corporation Model 1900D Airliner Structural Inspection Manual, Part Number 129-590000-65E5, dated May 1, 2013.

(3) For Beechcraft Corporation service information identified in this AD, contact Beechcraft Corporation at address: 10511 E. Central, Wichita, Kansas 67206; phone: (800) 429-5372 or (316) 676-3140; Internet: [http://www.beechcraft.com/customer\\_support/contact\\_us/](http://www.beechcraft.com/customer_support/contact_us/).

(4) You may view this service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kanas City, Missouri, on November 15, 2013.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

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